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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,029	04/20/2004	John R. Gustafson	K35A 1507	7079
35219	7590	03/08/2005	EXAMINER	
WESTERN DIGITAL TECHNOLOGIES, INC. 20511 LAKE FOREST DR. -C205 LAKE FOREST, CA 92630			RENNER, CRAIG A	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/829,029	Applicant(s) GUSTAFSON ET AL.	
	Examiner Craig A. Renner	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,8,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20 April 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 20 April 2004. These drawings are accepted.

Specification

2. The abstract of the disclosure is objected to because it does not "include that which is new in the art to which the invention pertains," i.e., the claimed invention.

Appropriate correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informality:

In line 8 on page 19, "being are" should be changed to --are-- for better clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Koide (US 4,620,301).

Koide teaches a spindle motor (FIGS. 9-10, for instance) comprising a spindle motor hub (inherently part of rotor 5000); a magnet (inherently part of rotor 5000) radially attached about the spindle motor hub; and a spindle motor stator (7000) including a stator rim (outer-most portion of 7000); a plurality of wound stator teeth arrayed about and internally extending from the stator rim (as shown in FIG. 10, for instance), windings (C) being formed about the wound stator teeth, the wound stator teeth being sized to fit about the magnet in operable communication therewith (as shown in FIG. 10, for instance); and at least one bare stator tooth (to the left of the number "5000" in FIG. 10, for instance) internally extending from the stator rim between two respective ones of the wound stator teeth (when viewed in a circumferential direction, as shown in FIG. 10, for instance).

With respect to the intended use limitations appearing in lines 1-2 and 13-14 claim 7, note that a recitation with respect to the manner in which a claimed apparatus (i.e., "spindle motor") is intended to be employed (i.e., "for use in a disk drive having a rotatable head stack assembly" and "for allowing the head stack assembly to pivot over the at least one bare stator tooth", for instance) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647 (PTO BPAI 1987).

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6. Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Akutsu et al. (US 6,078,467).

Akutsu teaches a spindle motor (FIGS. 1-3, for instance) comprising a spindle motor hub (10); a magnet (9a) radially attached about the spindle motor hub; and a spindle motor stator (7) including a stator rim (7a-7f); a plurality of wound stator teeth (7g1-7g3) arrayed about and internally extending from the stator rim, windings (8b) being formed about the wound stator teeth, the wound stator teeth being sized to fit about the magnet in operable communication therewith (as shown in FIG. 1, for instance), at least one of the wound stator teeth being a reduced winding height (8a) stator tooth, windings being formed about the reduced winding height stator tooth to a winding height (F-lx2) less than that (F) of a remainder of the wound stator teeth (as shown in FIG. 3, for instance).

With respect to the intended use limitations appearing in lines 1-2 and 14-15 claim 8, note that a recitation with respect to the manner in which a claimed apparatus (i.e., "spindle motor") is intended to be employed (i.e., "for use in a disk drive having a rotatable head stack assembly" and "for allowing the head stack assembly to pivot over the reduced winding height stator tooth", for instance) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See *Ex parte Masham*, supra.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koide (US 4,620,301) in view of Thompson et al. (US 4,870,518).

Koide teaches the spindle motor as detailed in paragraph 5, *supra*, further wherein the spindle motor is a component of a disk drive comprising a disk drive base (unlabeled lower-most element in FIG. 9, for instance); a head stack assembly (includes 3000, for instance) attached to the disk drive base; and the spindle motor attached to the disk drive base. Koide, however, remains silent as to the head stack assembly attachment being provided "rotatably".

Thompson teaches a head stack assembly attachment being provided rotatably in the same field of endeavor for the purpose of enabling "fast access time and infinite positionability at low cost" (lines 56-63 in column 2, for instance). It would have been

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obvious to a person having ordinary skill in the art at the time the invention was made to have had the head stack assembly attachment of Koide be provided rotatably as taught by Thompson. The rationale is as follows:

One of ordinary skill in the art would have been motivated to have had the head stack assembly attachment of Koide be provided rotatably as taught by Thompson since such enables fast access time and infinite positionability at low cost.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akutsu et al. (US 6,078,467) in view of Thompson et al. (US 4,870,518).

Akutsu teaches the spindle motor as detailed in paragraph 6, supra, further wherein the spindle motor is a component of a disk drive comprising a disk drive base (18); a head stack assembly (6) attached to the disk drive base; and the spindle motor attached to the disk drive base. Akutsu, however, remains silent as to the head stack assembly attachment being provided "rotatably".

Thompson teaches a head stack assembly attachment being provided rotatably in the same field of endeavor for the purpose of enabling "fast access time and infinite positionability at low cost" (lines 56-63 in column 2, for instance). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the head stack assembly attachment of Akutsu be provided rotatably as taught by Thompson. The rationale is as follows:

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One of ordinary skill in the art would have been motivated to have had the head stack assembly attachment of Akutsu be provided rotatably as taught by Thompson since such enables fast access time and infinite positionability at low cost.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (703) 308-0559. The examiner can normally be reached on Tuesday-Friday 7:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Craig A. Renner
Primary Examiner
Art Unit 2652

CAR